notable differences in episode costs and in the use of other classes of prescription drugs. **CONCLUSIONS:** The benchmark data presented here rests on a stable and credible foundation, and offer a unique and integrated perspective on the care of MS. While the information presented here may generate more questions than it can precisely answer, it has genuine value as a high-level starting point for more definitive pharmacoeconomic studies.

NEUROLOGICAL DISORDERS—Health Care Use & Policy

PNL21

PATTERNS OF TOPIRAMATE UTILIZATION AMONG MEDICAID PATIENTS: DIAGNOSIS, COMORBIDITIES AND REAL-WORLD DOSING

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OBJECTIVE: To evaluate the patient characteristics, diagnosis/comorbidities, and real-world dosing among Medicaid patients prescribed topiramate. **METHODS:** A retrospective database analysis was conducted using South Carolina (SC) and Texas (TX) ambulatory Medicaid claims from October 1, 2003 through December 31, 2004. Patients were required to have ≥2 topiramate prescriptions during the study period and were required to be <65 years old. Patients were categorized into four cohorts: 1) epilepsy only; 2) migraine only; 3) epilepsy and migraine; and 4) neither epilepsy nor migraine. A comprehensive set of additional diagnoses, based on literature search, Micromedex compendium, and USPDI, was also examined. Demographic characteristics and average daily dose of topiramate (ADDoT) were summarized using descriptive statistics. **RESULTS:** During 2004, there were 2216 patients in SC Medicaid and 4766 patients in TX Medicaid meeting the study selection criteria. Mean (SD) age was 29.9 (15.9) in SC, and 27.1 (16.1) in TX. In SC, the cohort classification percentages were 32.3% (epilepsy only), 29.7% (migraine only), 10.7% (epilepsy and migraine), and 27.3% (neither epilepsy nor migraine). In TX, the cohorts were 39.6% (epilepsy only), 16.4% (migraine only), 9.2% (epilepsy and migraine), and 34.9% (neither epilepsy nor migraine). In the neither epilepsy nor migraine cohort, the most common diagnoses were bipolar disorder and depression. Mean (SD) ADDoT in the epilepsy only cohort was 205.2 mg (157.5) [SC], 239.6 mg (182.1) [TX]. The ADDoT in the migraine only cohort was 136.5 mg (112.6) [SC], 150.0 mg (129.6) [TX]. **CONCLUSION:** This is the first study to examine patterns of topiramate use in two Medicaid populations. It revealed that topiramate was prescribed in a young population, and approximately 70% of patients had an epilepsy and/or migraine diagnosis.

NEUROLOGICAL DISORDERS—Methods and Concepts

PNL22

ESTIMATING THE COST OF NURSING HOME CARE FOR PATIENTS WITH PARKINSON'S DISEASE USING RETROSPECTIVE DATABASE ANALYSIS

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OBJECTIVES: The purpose of this study was to determine the cost of nursing home care for patients with Parkinson's disease using retrospective database analysis. **METHODS:** The Medical Expenditures Panel Survey Nursing Home Component (MEPS-NHC) was used to estimate the cost of nursing home care for patients with Parkinson's disease. A total of 5899 patients in 815 nursing facilities were sampled in the MEPS-NHC. Since the MEPS-NHC is only accessible through the Center for Financing, Access and Cost Trends (CFACT) located in Rockville, MD, it was necessary to apply to the CFACT Data Center and request access to the data. In order to analyze the MEPS-NHC data it was necessary to link multiple files together to create one file for analysis. The person level files (NHC001P, NHC-002, and NHC-007) were merged using the original person identification number (ORIGPERSID) and this resulted in the creation of one person level file. The facility level files (NHC-001F and NHC-003) were merged using the sample facility identification number (SFID) and this resulted in one facility level file. The SFID appeared in NHC-002 of the person level files and was used as the common variable to merge the single person level file and facility level files that were created into one final merged file. **RESULTS:** Using the patient weights assigned by MEPS-NHC, these 208 patients represented 99,989 Parkinson's patients in nursing home facilities in the United States. The weighted total for nursing home costs for patients with Parkinson's disease in 1996 was $3.2 billion. The weighted total nursing home cost for males in 1996 was $1.14 billion and for females the weighted total cost was $2.08 billion. **CONCLUSIONS:** The estimate presented here highlights the need for future studies that identify the cost of nursing home care for other chronic disease states.

PNL23

CONTROLLING SELECTION BIAS ON CONTINUOUS VARIABLES

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OBJECTIVE: One of the disadvantages of propensity score matching is failure to apply on continuous variables. This paper proposes a method to control for selection bias when propensity score matching technique is not applicable. **METHODS:** The proposed method first uses continous variable rather than a binary variable in the first stage estimation. Since non-treated patients will have zero use and treated patient will have positive use of treatment. Tobit regression is proposed to estimate treatment use. Second, using Tobit residuals in the second stage equation to estimating health care cost or utility, we showed that selection bias due heterogeneity of patients are removed. **RESULTS:** Market Scan data were used to estimate total health care expenditures of migraine patients treated by triptan. Number of triptan scripts is used to do matching rather than binary variable. Mean value for triptan scripts for treated patients were 4.37. After certain inclusion and exclusion criteria 43,776 migraine patient with triptan used created our analytic samples. We used same number of control patients. After controlling for demographic and clinical factors, we add Tobit residuals as an additional variable in to our heath expenditure model. Significance of coefficient on residuals showed that selection bias exists and failure to account for that bias would yield spurious results. **CONCLUSIONS:** Propensity Score matching may not be applied in certain situations. This paper examined a case where selection was due to continuous variable and proposed and applied a technique under this circumstance.